Figure 1: Predicted protein sequence of mGγ12 (SEQ ID NO:1)

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1    MSSKTASTNS IAQARRTVQQ LRLEASIERI KVSKASADLM SYCEEHARSD

51   PLLMGIPTSE NPFKDKKTCI IL*
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Figure 2: cDNA sequence of mGγ12 variant 1 (SEQ ID NO:2)

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   1  CTAGAATTCA GCGGCCGCTG AATTCTAGGC GACGACGGCG AAGAGTGAGT

  51  GCCAAGGTTC ATATGGGAAG GACTTTGGGG TGAGCATCTT CTCTATTTCC

 101  AGCTGGCTTT TCTGATTTTC AGAAAGAAGA CTCATCAAAG ATGTCCAGCA

 151  AGACGGCAAG CACCAACAGC ATAGCCCAAG CCAGGAGAAC TGTGCAGCAG

 201  CTGAGATTGG AAGCCTCCAT CGAAAGAATA AAGGTCTCAA AAGCATCAGC

 251  AGACCTGATG TCATACTGTG AGGAGCATGC CCGGAGCGAC CCCCTGCTGA

 301  TGGGCATACC GACCTCAGAA AACCCGTTCA GGATAAGAA GACCTGCATC

 351  ATCTTATAGT GGACCAGGAA GCGCCCCTTG CCTCTTAACG CAAACCACAG

 401  CAGCAACCTG AAGGGATTCC TTCAGCTTAC CTGGTAACCA CAGCTAGTAA

 451  CTAAAACACC CTTCTCTCGG AATAATAGAC CCTGAAGTCT CTCTTTTTCA

 501  AGTTGTCCTT TCTTCACCCT TTACTGATTT AATACAGAAT AACAATCTTA

 551  TTTTCTATTT GATAACTATG GTATCATATT GGGTTACTGT ATAAGGAAAA

 601  TGGCAGGGGA GTTGTGGGAA GCTTGTCTTT ACAAAATATA ATTGATTAAG

 651  ATATGTCAAG ACCTACATTG TCTAAGCACC GGCAAATTAA AATGTCGAGA

 701  ATCACTTCAG TCAAAAACCT TTATATTCTG TTCTTAATAA TGTTTGTGCC

 751  AACCTATATC CCATGTAAGG GATCTGGGGA GGAGGCATGT GTCTACAACC

 801  ATACCTTTTT GCACTATGGG CACTAACCAC CCTGAAACTT CCTGCGGTAG

 851  CTCCCTCCCT TCAGAGTTAC ATCATTATCC TGACTCTGTG TAGGTAAATT

 901  TCCGTGAAAT TTTTGTACAA AAAAAGGTA ATGAAGAAC GTTGCAAAGA

 951  TCATCTGCAT TATAATGAGT TGATGCTGTT CTCACTCCTC TCTTGGAATT

1001  GTGCTGGCCC CTTAGTCTAC AATAAACTGT GCCAATTAAA AACCTAAGGC

1051  TAAAACTGAA AGCCCTTTGA TGGGGTCTTA ACTCATATCA GTCATTTGGG

1101  CTTCTCTGAT CCTGAGGCTA AGAAAGGGGA AGAGACCCTC AGGAGGCAGC

1151  TTCCACTCCA GGGCTCTTGA TCTCTGCTGG ATTGGGGGTG GCCACCTCAG

1201  AAACTTCCAC CCTCATGACT GGAATGGAAG AGGGGACCGA GAGCCTCACA
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1251  ATCTCGGAGA GGGAGGAGAA ATTCTTAAAA ACAGCTGCTC TCCTGCGCCC

1301  AGCTTCACAG GCAGCCCTGC CCCTTTCTCC TCACCAGCAT GGTACCTGCC

1351  CTTACTGCTA GAGCAGCTGC TTGTAGAGGG ACATTCCCTC CTTCCCAGTT

1401  TTAACTGGTG GACCACAGTG GGGGGAAAAA CATTCAAGCG ATATAAAGAC

1451  ACTTGGGCTC TTTGCAGATG CCTATACTTC AACACTACC ATGTCCACAA

1501  ACCACCCTGG GGGAGGGCCC TTCCAAGGG AGGCTTGCTA GTTTCAGCGT

1551  CTAGCAGTTG GGTCCTCACT TTTACTCCAA TTGTGAAAAT AGCCCACGTA

1601  CCCTCGCAGT GTCCAGTAGG GATCCCAGAG GCACATAACC AAGAAAGGAT

1651  TTTGACTTTG TCACAGTGAC TATTTAAAAT AATCTATTCG AAGTCCAAAC

1701  CAAACACAAA GCCTGTGATA TTTTAGGTTA TTAAGGTAAC TGCTAATGAA

1751  GGATTTTAAA AAGTGTCCTC AAAAAGGACT TAGCCCCGGG AGTTGTTTAT

1801  AAAATTTCCC CCACTTGTAT ACAGTGTGCA CTAAAAGAAA ATGTATTTTA

1851  ATATCTAATG CCTGGGCTCT GAGCGTCATG CTTCTTGGTG GTAAACATGC

1901  AGTCCTGTTC CTAAGTGACT CAGAGGCATC AGAATTTCTC CACGTTACCC

1951  ATCTGCTTGG CACTCGGAAC TGAGCGTGTG AAATCCATAG CGCTGCCCAC

2001  AACCTGTTCT CACTGCTTAG CTCCCAGCTG GATTAAAGAC ACCTGCTCAG

2051  GCGGGAGAGA GAGAGAGAGA GCGAGCTTTT ACCTTGGAAA AGGTAAAGAT

2101  GGAAATGTAC ACCAAAAAAG ACAATTTTTA CATTTAATGG AACATTCTTT

2151  TTTTTTACAA GTATATTTTT CTACTGATAG TTTCAGAACA CTAATCTTAT

2201  ATTCACTCTA ATCTTAAACA TGTTTCTTTA AATATTTATA AGGCAGTTTA

2251  TTACAGAATA TTTTCATGCA ATCATGTGCA CATTATTGGT AGCAAACATA

2301  GTATATCCTT TAGTACTTTA GCATATTTTT GTTAAAATAC TTTTAATGGT

2351  AAGAAATGAA CTTGAGGTCC CAGGAGGTTT TGTTGCCTTT TCATTGATTA

2401  GAGACAATAA ATATCTTGTA ACTTCCTAAC CAGATCTGAG CTGTGCTCAC

2451  AATAATAATA ATGAAATCAG ATTCTTTGAT GCTGGACTCA GGAGGGAAAT
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2501   CATTAGCCAA CTGTTGACTT ACTTATAGCT AGATGTCTAT GTGAGAAAGT

2551   ATAATATATA TATATACACA TATATATGAC ATGTAAGAGT CACTTTTATT

2601   TATCTGTCTT TGTTCACTTA TGAAGCCGGT AACTGCAGCA GTATGTTGGT

2651   GATGTCATGA TGCACAGAAG TCCCATGTGG AGTGTTTTTC CCACACTGAC

2701   AACTTGGCCT CCTTTCTGTG TGTTCAGTCT GTTGTCTGAA CTAACACTCC

2751   CGCGAGCACT ATACTCTTTA TACTCTGATC CCCCTAGTTC ATCTTAAATT

2801   TGTCTGTGGC CCTGGCAAGA TAGCGTACAC AAGATTCCAT GACTCCAGAG

2851   CATCTTGAAG AAACATACAT ATTTTGAAAG AGGGGAAATG TAGCAGATAG

2901   TTCACAAGCT GCGGGTTGTA GCTAAATATT CCATTTCTTT GAAATCATGT

2951   TTCTAAATTC TTTACCATCA GAAAGAAAAG GAGTGTCATA CACTTTCAAG

3001   GGAAGGCTTG GTCTGCGTTT TCTGTGTTTG GATTATTTTT ATACTTTGCT

3051   GATCTTTAAG CTATCCATGG GGGAAATTTT ATACCAACGA GTTAATAATT

3101   CTCATTCATC GTTTACACAA TGTAACATGT GTCATACTGG GGCCAGCGAG

3151   ATGGCTCAGT AGGTAAAGGT GCTTGATGCT AAGCCCGGCA GCCTGTGTTT

3201   CATCTACAGG ATGCACAACA TAAAAGAAAA GATCTGATTC CCACAGGTTC

3251   TCTTCTGACC TACACACACA CACACTAAAA TAACATTTAA AAATATGTGC

3301   CAAATTATAT TTGTTCGGGT GCCACCTTCC ACCAGCTTAC CACTACGGTA

3351   GAACTGTCAA ATTCATCTCC CTGAATTTGT CTTAAAGGGG TGTCCATGCA

3401   CAGGCCCAAG AGTCACCTCC AATGAAATAA ATGTAATACT GAAGTATGCC

3451   ATGATGTTTG TTGTTTTCTT TCATCGTAAG CCTGTAAGCA GGAAAAATAC

3501   GTCAAATCAG ATAGAATAGA GCATTTACCA GTGGTCGATG GCCTGGTCAG

3551   TCCTGTGCCG GGTGACTTAG GACCAGGCAC GTCAGCTCTC TGAGCCTCCC

3601   CTTCCCTTGT TGTCACAAGG GAATAGAAGC AGAAGAAGCT GAGAGCCTCC

3651   CTATTCCCAG ATGCCCTGGT GGAATGACCT GCCTCTCTGC CGTTTCTGCC

3701   AACGTGTTGG TGCTATAAGC TGCTTCAAAT ACCAGTTTGT CTGTAGTGTG

3751   TACTCACCTA ATCACTTGTT ATCCAGTGCC TGTTCTAGGT TTATGGACTT
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3801   AACTATTTCT GTGATGTTTC ATTTTTAGCC ATGTTAACTC CTAACACATA

3851   TTCTCTTATG TCTCAGTAAA GTTTCATTTG ATAAGTTGTT GAGATTCTGT

3901   TATTTGATAA TATTCTTCGG CTGTCCATCC AGCATCTTAA TCACTTTAAA

3951   ACTGTGATTG TTATTTGCAA CTCTGTTCTT TGGAAAGAAT AAAAGCATTT

4001   TTTTTCACTT GCTAACATGC TCACAAATGT GAGAGAAGAG TCATTAAAAG

4051   CTTTACTTAC TGGGTCAGTG CGTCATTGAC TCCTTTCTGT GTTTTGCCCA

4101   ATAAATTAAT AAAGACCAA AAAAAAAAA AAAAAAAAA AAAAAA
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Figure 3: cDNA sequence of mGγ12 variant 2 (SEQ ID NO:3)

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   1    GCAGCGGCGG CGGCGGCGAC GACGGCGAAG AGTTCATATG GGAAGGACTT

  51    TGGGGTGAGC ATCTTCTCTA TTTCCAGCTG GCTTTTCTGA TTCACCCCAC

 101    CATTTAAAAC CTGGAGGCAC TGGGCCACAC AAAGCCTTGC TGATTTTCAG

 151    AAAGAAGACT CATCAAAGAT GTCCAGCAAG ACGGCAAGCA CCAACAGCAT

 201    AGCCCAAGCC AGGAGAACTG TGCAGCAGCT GAGATTGGAA GCCTCCATCG

 251    AAAGAATAAA GGTCTCAAAA GCATCAGCAG ACCTGATGTC ATACTGTGAG

 301    GAGCATGCCC GGAGCGACCC CCTGCTGATG GGCATACCGA CCTCAGAAAA

 351    CCCGTTCAAG GATAAGAAGA CCTGCATCAT CTTATAGTGG ACCAGGAAGC

 401    GCCCCTTGCC TCTTAACGCA AACCACAGCA GCAACCTGAA GGGATTCCTT

 451    CAGCTTACCT GGTAACCACA GCTAGTAACT AAAACACCCT TCTCTCGGAA

 501    TAATAGACCC TGAAGTCTCT CTTTTTCAAG TTGTCCTTTC TTCACCCTTT

 551    ACTGATTTAA TACAGAATAA CAATCTTATT TTCTATTTGA TAACTATGGT

 601    ATCATATTGG GTTACTGTAT AAGGAAAATG GCAGGGGAGT TGTGGGAAGC

 651    TTGTCTTTAC AAAATATAAT TGATTAAGAT ATGTCAAGAC CTACATTGTC

 701    TAAGCACCGG CAAATTAAAA TGTCGAGAAT CACTTCAGTC AAAAACCTTT

 751    ATATTCTGTT CTTAATAATG TTTGTGCCAA CCTATATCCC ATGTAAGGGA

 801    TCTGGGGAGG AGGCATGTGT CTACAACCAT ACCTTTTTGC ACTATGGGCA

 851    CTAACCACCC TGAAACTTCC TGCGGTAGCT CCCTCCCTTC AGAGTTACAT

 901    CATTATCCTG ACTCTGTGTA GGTAAATTTC CGTGAAATTT TTGTACAAAA

 951    AAAAGGTAAT GAAAGAACGT TGCAAAGATC ATCTGCATTA TAATGAGTTG

1001    ATGCTGTTCT CACTCCTCTC TTGGAATTGT GCTGGCCCCT TAGTCTACAA

1051    TAAACTGTGC CAATTAAAAA CCTAAGGCTA AAACTGAAAG CCCTTTGATG

1101    GGGTCTTAAC TCATATCAGT CATTTGGGCT TCTCTGATCC TGAGGCTAAG

1151    AAAGGGGAAG AGACCCTCAG GAGGCAGCTT CCACTCCAGG GCTCTTGATC
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1201  TCTGCTGGAT TGGGGGTGGC CACCTCAGAA ACTTCCACCC TCATGACTGG

1251  AATGGAAGAG GGACCGAGA GCCTCACAAT CTCGGAGAGG GAGGAGAAAT

1301  TCTTAAAAAC AGCTGCTCTC CTGCGCCCAG CTTCACAGGC AGCCCTGCCC

1351  CTTTCTCCTC ACCAGCATGG TACCTGCCCT TACTGCTAGA GCAGCTGCTT

1401  GTAGAGGGAC ATTCCCTCCT TCCCAGTTTT AACTGGTGGA CCACAGTGGG

1451  GGGAAAAACA TTCAAGCGAT ATAAAGACAC TTGGGCTCTT TGCAGATGCC

1501  TATACTTCCA ACACTACCAT GTCCACAAAC CACCCTGGGG GAGGGCCCTT

1551  CCAAAGGGAG GCTTGCTAGT TTCAGCGTCT AGCAGTTGGG TCCTCACTTT

1601  TACTCCAATT GTGAAAATAG CCCACGTACC CTCGCAGTGT CCAGTAGGGA

1651  TCCCAGAGGC ACATAACCAA GAAAGGATTT TGACTTTGTC ACAGTGACTA

1701  TTTAAAATAA TCTATTCGAA GTCCAAACCA AACACAAAGC CTGTGATATT

1751  TTAGGTTATT AAGGTAACTG CTAATGAAGG ATTTTAAAAA GTGTCCTCAA

1801  AAAGGACTTA GCCCCGGGAG TTGTTTATAA AATTTCCCCC ACTTGTATAC

1851  AGTGTGCACT AAAAGAAAAT GTATTTTAAT ATCTAATGCC TGGGCTCTGA

1901  GCGTCATGCT TCTTGGTGGT AAACATGCAG TCCTGTTCCT AAGTGACTCA

1951  GAGGCATCAG AATTTCTCCA CGTTACCCAT CTGCTTGGCA CTCGGAACTG

2001  AGCGTGTGAA ATCCATAGCG CTGCCCACAA CCTGTTCTCA CTGCTTAGCT

2051  CCCAGCTGGA TTAAAGACAC CTGCTCAGGC GGGAGAGAGA GAGAGAGAGC

2101  GAGCTTTTAC CTTGGAAAAG GTAAAGATGG AAATGTACAC CAAAAAAGAC

2151  AATTTTTACA TTTAATGGAA CATTCTTTTT TTTACAAGT ATATTTTTCT

2201  ACTGATAGTT TCAGAACACT AATCTTATAT TCACTCTAAT CTTAAACATG

2251  TTTCTTTAAA TATTTATAAG GCAGTTTATT ACAGAATATT TTCATGCAAT

2301  CATGTGCACA TTATTGGTAG CAAACATAGT ATATCCTTTA GTACTTTAGC

2351  ATATTTTTGT TAAAATACTT TTAATGGTAA GAAATGAACT TGAGGTCCCA

2401  GGAGGTTTTG TTGCCTTTTC ATTGATTAGA GACAATAAAT ATCTTGTAAC
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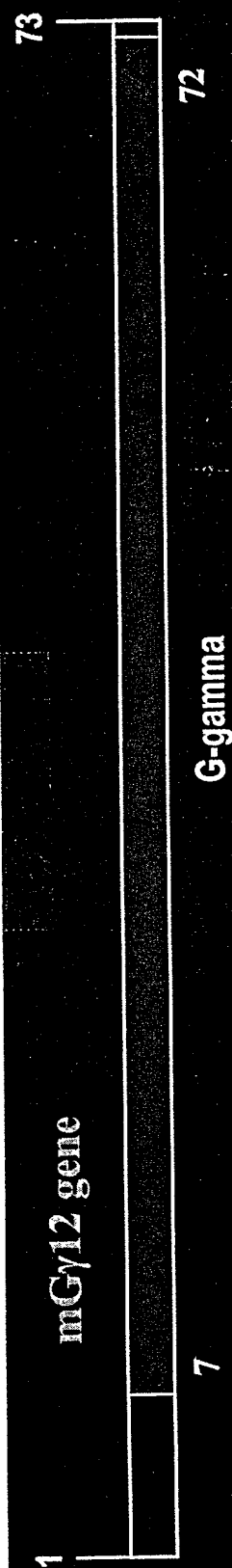
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2451   TTCCTAACCA GATCTGAGCT GTGCTCACAA TAATAATAAT GAAATCAGAT

2501   TCTTTGATGC TGGACTCAGG AGGGAAATCA TTAGCCAACT GTTGACTTAC

2551   TTATAGCTAG ATGTCTATGT GAGAAAGTAT AATATATATA TATACACATA

2601   TATATGACAT GTAAGAGTCA CTTTTATTTA TCTGTCTTTG TTCACTTATG

2651   AAGCCGGTAA CTGCAGCAGT ATGTTGGTGA TGTCATGATG CACAGAAGTC

2701   CCATGTGGAG TGTTTTTCCC ACACTGACAA CTTGGCCTCC TTTCTGTGTG

2751   TTCAGTCTGT TGTCTGAACT AACACTCCCG CGAGCACTAT ACTCTTTATA

2801   CTCTGATCCC CCTAGTTCAT CTTAAATTTG TCTGTGGCCC TGGCAAGATA

2851   GCGTACACAA GATTCCATGA CTCCAGAGCA TCTTGAAGAA ACATACATAT

2901   TTTGAAAGAG GGGAAATGTA GCAGATAGTT CACAAGCTGC GGGTTGTAGC

2951   TAAATATTCC ATTTCTTTGA AATCATGTTT CTAAATTCTT TACCATCAGA

3001   AAGAAAAGGA GTGTCATACA CTTTCAAGGG AAGGCTTGGT CTGCGTTTTC

3051   TGTGTTTGGA TTATTTTTAT ACTTTGCTGA TCTTTAAGCT ATCCATGGGG

3101   GAAATTTTAT ACCAACGAGT TAATAATTCT CATTCATCGT TTACACAATG

3151   TAACATGTGT CATACTGGGG CCAGCGAGAT GGCTCAGTAG GTAAAGGTGC

3201   TTGATGCTAA GCCCGGCAGC CTGTGTTTCA TCTACAGGAT GCACAACATA

3251   AAAGAAAAGA TCTGATTCCC ACAGGTTCTC TTCTGACCTA CACACACACA

3301   CACTAAAATA ACATTTAAAA ATATGTGCCA AATTATATTT GTTCGGGTGC

3351   CACCTTCCAC CAGCTTACCA CTACGGTAGA ACTGTCAAAT TCATCTCCCT

3401   GAATTTGTCT TAAAGGGGTG TCCATGCACA GGCCCAAGAG TCACCTCCAA

3451   TGAAATAAAT GTAATACTGA AGTATGCCAT GATGTTTGTT GTTTTCTTTC

3501   ATCGTAAGCC TGTAAGCAGG AAAAATACGT CAAATCAGAT AGAATAGAGC

3551   ATTTACCAGT GGTCGATGGC CTGGTCAGTC CTGTGCCGGG TGACTTAGGA

3601   CCAGGCACGT CAGCTCTCTG AGCCTCCCCT TCCCTTGTTG TCACAAGGGA

3651   ATAGAAGCAG AAGAAGCTGA GAGCCTCCCT ATTCCCAGAT GCCCTGGTGG

3701   AATGACCTGC CTCTCTGCCG TTTCTGCCAA CGTGTTGGTG CTATAAGCTG
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3751   CTTCAAATAC CAGTTTGTCT GTAGTGTGTA CTCACCTAAT CACTTGTTAT

3801   CCAGTGCCTG TTCTAGGTTT ATGGACTTAA CTATTTCTGT GATGTTTCAT

3851   TTTTAGCCAT GTTAACTCCT AACACATATT CTCTTATGTC TCAGTAAAGT

3901   TTCATTTGAT AAGTTGTTGA GATTCTGTTA TTTGATAATA TTCTTCGGCT

3951   GTCCATCCAG CATCTTAATC ACTTTAAAC TGTGATTGTT ATTTGCAACT

4001   CTGTTCTTTG GAAAGAATAA AAGCATTTTT TTTCACTTGC TAACATGCTC

4051   ACAAATGTGA GAGAAGAGTC ATTAAAAGCT TTACTTACTG GGTCAGTGCG

4101   TCATTGACTC CTTTCTGTGT TTTGCCCAAT AAATTAATAA AAGACCAAAA

4151   AAAAAAAAAA AAAAAAAAA AAAAA
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Figure 4:   amino acid sequence of human Gγ12 (SEQ ID NO:4)

1. MSSKTASTNN IAQARRTVQQ LRLEASIERI KVSKASADLM SYCEEHARSD
51. PLLIGIPTSE NPFKDKKTCI IL

FIGURE 5